

SEP 13 2002

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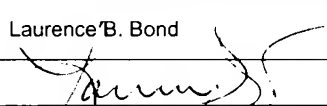
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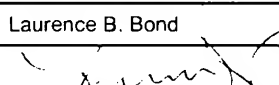
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TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	10/048,244
	Filing Date	January 25, 2002
	First Named Inventor	Donald K. Blumenthal, II
	Group Art Unit	To Be Assigned
	Examiner Name	To Be Assigned
Attorney Docket Number		0274-3858.1US

ENCLOSURES (check all that apply)		
<input checked="" type="checkbox"/> Postcard receipt acknowledgment (attached to the front of this transmittal)	<input checked="" type="checkbox"/> Information Disclosure Statement, PTO/SB/08A (08-00); <input checked="" type="checkbox"/> copy of cited references	<input type="checkbox"/> Terminal Disclaimer
<input checked="" type="checkbox"/> Duplicate copy of this transmittal sheet in the event that additional filing fees are required under 37 C.F.R. § 1.16	<input type="checkbox"/> Supplemental Information Disclosure Statement; PTO/SB/08A (08-00); copy of cited references and Check No. in the amount of \$180.00	<input type="checkbox"/> Terminal Disclaimer
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<input type="checkbox"/> Letter to Chief Draftsman and copy of FIGS. with changes made in red	<input type="checkbox"/> Assignment Papers (for an Application)	
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<input type="checkbox"/> Formal Drawings (sheets)	The Commissioner is authorized to charge any additional fees required but not submitted with any document or request requiring fee payment under 37 C.F.R. §§ 1.16 and 1.17 to Deposit Account 20-1469 during pendency of this application.	

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT		
Firm or Individual name	Laurence B. Bond	Registration No. 30,549
Signature		
Date	September 6, 2002	

CERTIFICATE OF MAILING			
I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231 on the date shown below.			
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13 SEP 2002

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Donald K. Blumethal, II

Serial No.: 10/048,244

Filed: January 25, 2002

For: HOMOGENEOUS FLUORESCENCE
METHOD FOR ASSAYING
STRUCTURAL MODIFICATIONS OF
BIOMOLECULES

Confirmation No.: 2667

Examiner: To Be Assigned

Group Art Unit: To Be Assigned

Attorney Docket No.: 0274-3858.1US

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I hereby certify that this correspondence along with any attachments referred to or identified as being attached or enclosed is being deposited with the United States Postal Service as First Class Mail on the date of deposit shown below with sufficient postage and in an envelope addressed to the Commissioner for Patents, Washington, D.C. 20231.

September 6, 2002
Date

Signature

Amanda Holland
Name (Type/Print)

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
Washington, D.C. 20231

Sir:

In compliance with the duty to disclose information material to patentability pursuant to 37 C.F.R. § 1.56, it is respectfully requested that this Information Disclosure Statement be entered and the documents listed on attached Form PTO-1449 or PTO/SB/08 be considered by the Examiner and made of record. Copies of the listed documents are enclosed pursuant to 37 C.F.R. § 1.98(a).

In accordance with 37 C.F.R. § 1.97(g) and (h), filing of this Information Disclosure Statement is not to be construed as a representation that a search has been made or an admission that the information cited herein is, or is considered to be, material to patentability as defined in

Serial No.: 10/048,244

37 C.F.R. § 1.56(b). Further, no representation is made by Applicant herein that no other possible material information as defined in 37 C.F.R. § 1.56(b) exists.

U.S. Patent Documents

<u>U.S. Patent No.</u>	<u>Publication Date</u>	<u>Patentee</u>
US - 4,777,128	10/11/1988	Lippa
US - 5,580,747	12/3/1996	Shultz, et al.
US - 5,654,419	8/5/1997	Mathies, et al.
US - 5,707,804	1/13/1998	Mathies, et al.
US - 5,723,340	3/3/1998	Karpf
US - 5,869,255	2/9/1999	Mathies, et al.

Foreign Patent Documents

<u>Document No.</u>	<u>Publication Date</u>	<u>Patentee</u>
JP 11-56398	3/3/1999	Hirano, et al.
FR 2,768,807	3/26/1999	Gerard, et al.

Other Documents

G. HARNISCHFEGER "Effect of Chemical Modification of Amino Groups by Fluorescamine on Partial Reactions of Photosynthesis" *Biochimica et Biophysica Acta*, 7 September 1978, Vol. 503, No. 3, Pages 473-479, see entire document.

Z. ZHANG et al. "Amylase Substrate Based on Fluorescence Energy Transfer" *Analytical Chimica Acta*, 17 September 1990, Vol. 236, No. 2, Pages 251-256, see entire document.

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B. PISPISA et al. "Intramolecular Electronic Energy Transfer between Naphthalene and Protoporphyrin Chromophores Bound to Sequential Peptides" *Macromolecules*, 19 December 1994, Vol. 27, No. 26, Pages 7800-7808, see entire document.

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J. JU et al. "Cassette Labeling for Facile Construction of Energy Transfer Fluorescent Primers" *Nucleic Acids Research*, 15 March 1996, Vol. 24, No. 6, Pages 1144-1148, see entire document.

M. P. LILLO et al. "Design and Characterization of a Multisite Fluorescence Energy-Transfer System for Protein Folding Studies: A Steady-State and Time-Resolved Study of Yeast Phosphoglycerate Kinase" *Biochemistry*, 16 December 1997, Vol. 36, No. 37, Pages 11261-11272, see entire document.

D. A. PEARCE et al. "Peptidyl Chemosensors Incorporating a FRET Mechanism for Detection of Ni(II)" *Bioorganic & Medicinal Chemistry Letters*, 04 August 1998, Vol. 8, No. 15, Pages 1963-1968, see entire document.

L. A. MARCAURELLE et al. "Direct Incorporation of Unprotected Ketone Groups into Peptides During Solid-Phase Synthesis: Application to the One-Step Modification of Peptides with Two Different Biophysical Probes for FRET" *Tetrahedron Letter*, 01 October 1998, Vol. 39, No. 40, Pages 7279-7282, see entire document.

- C. G. DOS REMEDIOS et al. "Fluorescence Resonance Energy Transfer Spectroscopy in a Reliable "Ruler" for Measuring Structural Changes in Proteins" *Journal of Structural Biology*, 1995, Vol. 115, Pages 175-185.
- K. B. LEE et al. "A New approach to Assay Endo-Type Carbohydrases: Bifluorescent-Labeled Substrates for Glycoamidases and Ceramide Glycanases" *Analytical Biochemistry*, 01 September 1995, Vol. 230, No. 1, Pages 31-36, see entire document.
- K. MATSUOKA et al. "A Bi-fluorescence-Labeled Substrate for Ceramide Glycanase Based on Fluorescence Energy Transfer" *Carbohydrate Research*, 16 October 1995, Vol. 276, No. 1, Pages 31-42, see entire document.
- D K. BLUMENTHAL "Development and Characterization of Fluorescently-Labeled Myosin Light Chain Kinase Cadmodulin-Binding Domain Peptides" *Molecular and Cellular Biochemistry*, 1993, Vol. 127/128, Pages 45-50, see entire document.
- L. J. MACALA et al. "Measurement of cAMP-Dependent Protein Kinase Activity Using a Fluorescent-Labeled Kemptide" *Kidney International* 1998, Vol. 54, Pages 1746-1750, see entire document.
- M. MELDAL et al. "Anthranilamide and Nitrotyrosine as a Donor-Acceptor Pair in Internally Quenched Fluorescent Substrates for Endopeptidases: Multicolumn Peptide Synthesis of Enzyme Substrates for Subtilisin Carlsberg and Pepsin" *Analytical Biochemistry*, 1991, Vol. 195, Pages 141-147, see entire document.
- W. STOCKER et al. "Fluorescent Oligopeptide substrates for Kinetic Characterization of the Specificity of *Astacus* Protease" *Biochemistry* 1990, Vol. 29, Pages 10418-10425, see entire document.
- M. TALIANI et al. "A Continuous Assay of Hepatitis C Virus Protease Based on Resonance Energy Transfer Depsipeptide Substrates" *Analytical Biochemistry* 1996, Vol. 240, Pages 60-67, see entire document.
- C. VENTURA et al. "Phorbol Ester Regulation of Opioid Peptide Gene Expression in Myocardial Cells" *The Journal of Biological Chemistry*, 15 December 1995, Vol. 270, No. 50, Pages 30115-30120, see entire document.
- C. ZANDONELLA et al. "Fluorogenic Alkyl diacyl Glycerols as Substrates for the Determination

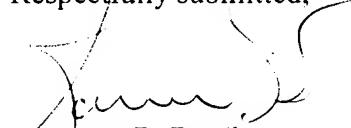
Serial No.: 10/048,244

of Lipase Activity and Stereoselectivity" Journal of Fluorescence, 1997, Vol. 7, No. 1
(Supplement), Pages 185S-186S, see entire document.

Applicant offers to supply any explanation or discussion of the documents that the Examiner feels is necessary or desirable and which is requested.

I hereby certify that each item of information contained in this Information Disclosure Statement first was cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the statement; therefore, no fee is due.

Respectfully submitted,



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Registration No. 30,549
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Salt Lake City, Utah 84110-2550
Telephone: 801-532-1922

Date: September 6, 2002
LBB/ah

Enclosures: Form PTO-1449 or PTO/SB/08
Cited Documents

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet	1	of	3
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Complete if Known

Application Number	10/048,244
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First Named Inventor	Donald K. Blumenthal, II
Group Art Unit	To Be Assigned
Examiner Name	To Be Assigned
Attorney Docket Number	0274-3858.1US

U.S. PATENT DOCUMENTS

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FOREIGN PATENT DOCUMENTS

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Signature

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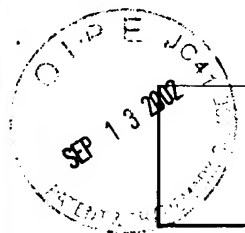
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First Named Inventor	Donald K. Blumenthal, II
Group Art Unit	To Be Assigned
Examiner Name	To Be Assigned
Attorney Docket Number	0274-3858 IUS

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		G. HARNISCHFEGER "Effect of Chemical Modification of Amino Groups by Fluorescamine on Partial Reactions of Photosynthesis" Biochimica et Biophysica Acta, 7 September 1978, Vol. 503, No. 3, Pages 473-479, see entire document.	
		Z. ZHANG et al. "Amlyase Substrate Based on Fluorescence Energy Transfer" Analytical Chimica Acta, 17 September 1990, Vol. 236, No. 2, Pages 251-256, see entire document.	
		A.-P. Wei et al. "Antibody-Mediated Fluorescence Enhancement Based on Shifting the Intramolecular Dimer/Monomer Equilibrium of Fluorescent Dyes" Analytical Chemistry, 01 May 1994, Vol. 66, No. 9, Pages 1500-1506, see entire document.	
		B. PISPISA et al. "Intramolecular Electronic Energy Transfer between Naphthalene and Protoporphyrin Chromophores Bound to Sequential Peptides" Macromolecules, 19 December 1994, Vol. 27, No. 26, Pages 7800-7808, see entire document.	
		K. M. PAARKHURST et al. "Kinetic Studies by Fluorescence Resonance Energy Transfer Employing a Double-Labeled Oligonucleotide: Hybridization to Oligonucleotide Complement and to Single-Stranded DNA" Biochemistry, 10 January 1995, Vol. 34, No. 1, Pages 285-292, see entire document.	
		J. JU et al. "Cassette Labeling for Facile Construction of Energy Transfer Fluorescent Primers" Nucleic Acids Research, 15 March 1996, Vol. 24, No. 6, Pages 1144-1148, see entire document.	
		M. P. LILLO et al. "Design and Characterization of a Multisite Fluorescence Energy-Transfer System for Protein Folding Studies: A Steady-State and Time-Resolved Study of Yeast Phosphoglycerate Kinase" Biochemistry, 16 December 1997, Vol. 36, No. 37, Pages 11261-11272, see entire document.	
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		L. A. MARCAURELLE et al. "Direct Incorporation of Unprotected Ketone Groups into Peptides During Solid-Phase Synthesis: Application to the One-Step Modification of Peptides with Two Different Biophysical Probes for FRET" Tetrahedron Letter, 01 October 1998, Vol. 39, No. 40, Pages 7279-7282, see entire document.	
		C. G. DOS REMEDIOS et al. "Fluorescence Resonance Energy Transfer Spectroscopy in a Reliable "Ruler" for Measuring Structural Changes in Proteins" Journal of Structural Biology, 1995, Vol. 115, Pages 175-185.	
		K. B. LEE et al. "A New approach to Assay Endo-Type Carbohydrases. Bifluorescent-Labeled Substrates for Glycosidases and Ceramide Glycanases" Analytical Biochemistry, 01 September 1995, Vol. 230, No. 1, Pages 31-36, see entire document.	
		K. MATSUOKA et al. "A Bi-fluorescence-Labeled Substrate for Ceramide Glycanase Based on Fluorescence Energy Transfer" Carbohydrate Research, 16 October 1995, Vol. 276, No. 1, Pages 31-42, see entire document.	
		D. K. BLUMENTHAL "Development and Characterization of Fluorescently-Labeled Myosin Light Chain Kinase C-terminal Binding Domain Peptides" Molecular and Cellular Biochemistry, 1993, Vol. 127-128, Pages 45-50, see entire document.	
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Examiner Signature		Date Considered	
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